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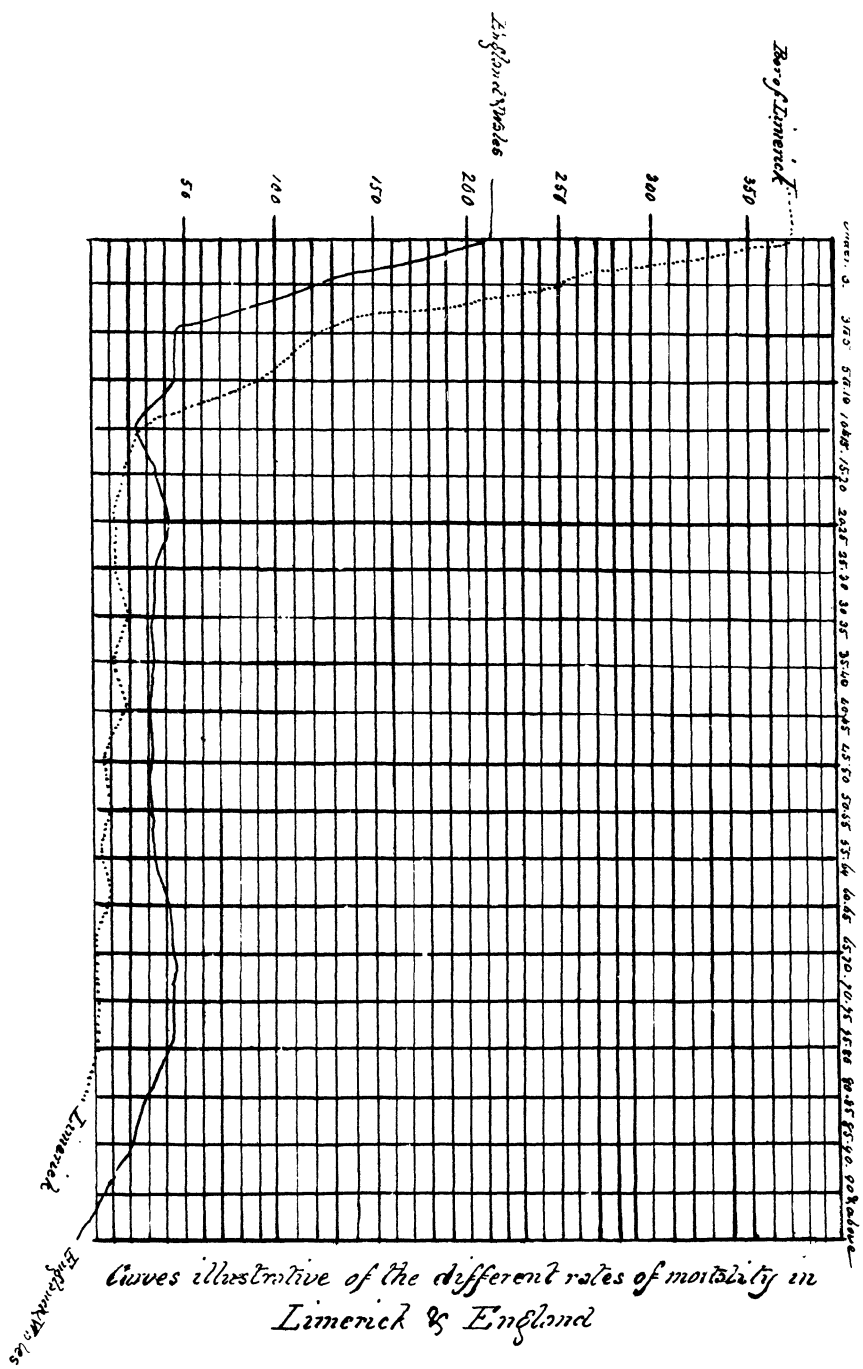
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Curves illustrative of the different rates of mortality in Limerick & England

QUARTERLY JOURNAL

OF THE

STATISTICAL SOCIETY OF LONDON.

JANUARY, 1841.

An Enquiry into the Mortality occurring among the Poor of the City of Limerick. By DANIEL GRIFFIN, M.D.

[*Read before the Statistical Society of London, November 16, 1840.*]

THE following enquiry was at first undertaken merely for the purpose of ascertaining what the losses by death were among the children of the poor, more especially at the earlier ages, beyond which I had not then any idea of extending it. From a considerable experience in dispensary practice, and the extreme wretchedness of the class in this city, which that species of charity is intended to relieve, I had long suspected that the mortality among the children of the poor must be much greater than is usually observed, even in situations in which it is very considerable. After a little time, finding the results interesting, I set about the investigation more formally, and procured a book, which, when properly ruled, contained columns for the names of parents, and of their living children, with their respective ages, and the diseases, if any, under which they then laboured. It contained, also, columns for the names of such parents and children as had died, together with their ages at the time of death, and the diseases of which they had died. Each parent who applied for medical relief at the dispensary was then questioned on all these particulars. The enquiry was confined entirely to persons of that class, and with very few exceptions was conducted by myself.

After I had obtained all the deaths which had occurred in one or two hundred families, and found them nearly equal to the number left alive, I perceived that facts taken down in this manner afforded no means of determining the rate of mortality *annually*, and thus of enabling me to compare the loss of life with that which occurs in other places; and, in fact, that this method could only give the proportions dying at different ages. It struck me, however, that as all the deaths occurred since the period of marriage, some rough approach to an annual mortality might be had by noting the duration of the married term in each family at the time of the enquiry, and then finding from this a mean term for the whole. This particular was therefore included in subsequent entries. The families were taken quite indiscriminately, and as the object was to ascertain the mortality of that class *in the city*, the only thing insisted on was, that they should have lived the whole, or much the greater portion, of the married period in town.

The city of Limerick is finely situated on the Shannon, at about 60 miles from the sea, the highest point to which the river is navigable without interruption. The soil is extremely rich, and independently of circumstances which might be remedied, there is nothing insalubrious in its position. The population in 1821 was stated at 59,045, and in 1831 at 67,575; of which number 44,100 were said to be in the city and suburbs, and the remainder in the rural districts, called the "Liberties." These last numbers are considered by many to be much under the truth, especially as in 1821 the number of souls to one house was rated at 11, and the tract called the Liberties is very extensive, embracing a circuit that in some places is 4 miles distant. The city is composed of 3 portions—the English town—the Irish town, and the New town, called New-town Pery. The first and oldest occupies the southern end of the King's island, a tract formed by the Shannon, here divided into two streams, of which the narrowest and most rapid is called the Abbey river; and both it and the Irish town were included within the walls when the city was fortified. From this circumstance, and its great antiquity, it contains a multitude of narrow filthy lanes, and of houses falling to decay; inhabited, many of them, from garret to cellar, by a most miserable population, consisting, among others, of ejected tenantry from the surrounding counties, who always on their expulsion make a run to the cities in search of food and shelter for their starving families. Of this last class, Limerick, from its situation in the centre of several counties, in which the system of depopulation has to a considerable extent prevailed, has received much more than its due proportion. It was no inconsiderable delay to me in the prosecution of this enquiry, that I was obliged to reject a number of families on the ground of their having only recently come into town; and I have caused the registrar of the Dispensary latterly to make a note in the register of the time during which each family applying for relief has resided in town, with the number of persons of whom it consists, in order to enable the Commissioners and the Poor Law Guardians to judge how many of these pauper ejected tenantry the city will be called on to support under the workhouse system. The larger portion of the English town consists of the parish of St. Mary, a place long celebrated for the afflicting instances of destitution it so frequently exhibits. Those who have read the simple and touching descriptions of individual suffering, given some years since, by the late Rev. Thomas Enraght, Roman Catholic curate of this parish, will not readily forget the circumstances to which I allude, or the force of those appeals, which brought him contributions for their relief, not only from various parts of England, but even from India. The Irish town, consisting principally of the parish of St. John, is very similarly circumstanced, though perhaps not quite to the same degree. There are, besides these, the parishes of St. Munchin and St. Patrick,* which are in a great degree suburban and rural, and inhabited principally also by the lower classes. The New town, consisting principally of the parish of St. Michael, presents a remarkable contrast to the portions hitherto described. It has been nearly all built within the last fifty years, and is exceedingly handsome. It consists chiefly of the dwellings of the wealthier shop-

* The Roman Catholic division of the parishes is used in these descriptions, as it is the one usually adopted by the classes of whom these enquiries were made.

keepers, merchants, and resident gentry of the city. Strangers, when they observe the elegance of the houses in this part of the town,—the neatness of the equipages, and the gay dresses of the more respectable portion of the inhabitants, can never understand how Limerick can possibly contain so much poverty as is reported; and even the inhabitants themselves of this part, whose business scarcely ever leads them into the older portions, have little conception how human life is wasting within a few hundred paces of their doors. The medical men of the city, and the Roman Catholic clergy, could easily undeceive them.

As this enquiry goes back over a good many years, and will therefore be supposed to be subject to all the looseness arising from defect of memory, it is necessary to say a few words on the degree of exactness that is capable of being obtained by the mode in which it was conducted. The following circumstances will enable us to form some judgment upon this point.

After I had obtained the deaths and other particulars occurring in nearly 800 families, it became necessary to form an index, to avoid repeating them. In doing this, I found that these particulars were taken down twice over in about forty cases, and I was startled on observing that there were in many instances very considerable differences in the two accounts. There were not only differences in the ages and in the assigned causes of death, but there were even differences in the numbers stated to be living and dead in these families. Though I found afterwards that this arose from my having in several cases obtained the accounts from different individuals, some of whom mentioned circumstances which others omitted, it was yet sufficiently discouraging; and as it was a point of primary importance, I took the trouble to tabulate the two accounts, for the sake of noting the differences more particularly. The following are the results.

Dividing the ages into classes of "under 1 year," "1 year and 2," "3 and 4," "5 to 9," &c., there were among the ages of 171 living persons differences which in 30 instances would have removed them from one class to the next above or below it; and among the ages of 124 dead persons, differences which in 27 instances would have produced the same effect. The number of the living in the two accounts differed by only 1 per cent., while that of the dead differed by about 11 per cent. In 23 instances out of about 100, there were differences as to the assigned causes of death; but in 15 of these it seemed to be only a substitution of what they probably considered the cause of the disease for one of its symptoms, such as "diarrhœa" for "worm fever," or "convulsions" for "teething." In the remaining 8 there was no analogy between the diseases specified in the two accounts as the causes of death. The following are the mean ages of the living and dead, as given by the two accounts:—

	First Account.		Second Account.		Difference.
	Years.	Mos.	Years.	Mos.	Months.
Mean age of 39 fathers . . .	43	3	44	2	11
„ 38 mothers . . .	39	10	40	9	11
„ 94 living children .	12	3	12	8	5
„ 100 dead „	2	6	3	2	8

It will be observed that the errors as to age, number, and other circumstances, are greatest as regards the dead, and this is exactly what might be anticipated; for many of the particulars recorded occurred in years long past, and may therefore easily be supposed to have been affected by defect of memory. I have observed, also, that in general, for the same reason, the accounts were more unsatisfactory when obtained from very old people. These circumstances, being only natural, will perhaps lead us to place some confidence in those particulars in which the difference in the two accounts was but slight, such as those relating to the living. But even with regard to the dead, I think we may assume, that the number stated in the following tables is at least not less than the truth; for I observed that though the information I sought was in general imparted with great willingness, and without the least appearance of any settled wish to deceive, it was very difficult in many instances to get mothers, from whom the accounts were in most cases obtained, to turn to such a painful subject as the loss of their children. Many of them wept bitterly while answering me, and I had reason to think sometimes that the strength of these feelings made them bring their relation to a close, before my catalogue contained the whole of the miserable truth. Besides, as they could have no idea of my object in collecting such information, and in general took my questions for part of the dispensary routine, I cannot imagine a motive for their making the deaths more numerous than they really were, still less for their giving the names and ages of children who never had any existence. From all this I think we may conclude:—

1st. That the numbers of the living given in the tables are correct, or very nearly so.

2nd. That the numbers of the dead are incorrect, but that those given are not less than the truth.

3rd. That the errors of age are greater in the tables of the dead than in those of the living, but that neither contain such an amount of error as on large numbers would greatly affect the mean age.

4th. That the assigned causes of death are more incorrect than the other particulars, but that even in these there must still be a considerable amount of truth, especially as regards the more obvious diseases, such as fever, small-pox, measles, &c., and the more distinct diseases of the respiratory system, such as phthisis, pleuritis, &c.

With these qualifications, which are quite necessary, I proceed to the tables. If any one feels inclined to discredit them from the circumstances I have mentioned, I would beg to remind him that better could not be done by this mode of ascertaining a mortality—that the enquiry was conducted with the utmost care of which its nature would admit, and that the value of many statistical enquiries supposed to be correct, would perhaps be shaken by such a severe scrutiny as I have adopted. Besides such qualifications cannot affect the strong evidence they contain, of the existence of a high rate of mortality among the lower classes of this city, the truth of which is confirmed by a comparison of the numbers living at different ages, with those in the Tables for England, in which it will be seen, that while there is a general conformity in their changes from the earlier ages upward, there is still such a deviation at the higher ages as is consistent with the supposition of such a high mortality. They also present other evidences of truth to those

who are accustomed to the study of vital statistics, and they must at least be believed to exhibit some approximation to the reality.

The first table is that of the deaths which had taken place in 1,017 families, up to the time of enquiry, with the ages at which those deaths occurred. I must mention one circumstance which had a tendency to produce incorrectness in these ages, *viz.*, a disposition to answer in round numbers. If a person was a year or so under or over 30, he was said to be 30 years of age, and the same may be said of 40, 50, and 60. Throwing the ages into classes differing by 5 years, is certainly in some degree a set-off against this source of error; still the effect of it is seen in the tables, about the ages just mentioned, which have numbers thrown upon them which should have been distributed over the intervening period. I have prefixed to this a table of the numbers living in these families, with their respective ages, that some opinion may be formed from it of the probable losses at each age.*

AGES.	TABLE I.			TABLE II.		
	Deaths at the undermentioned Ages in 1,017 Families of the Poorer Class in Limerick.			Living at the undermentioned Ages in 1,017 Families of the Poorer Class in Limerick.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 1 year . .	476	457	933	74	67	141
1 and under 3	446	373	819	153	116	269
3 " 5	173	192	365	128	117	245
5 " 10	141	136	277	267	279	546
10 " 15	34	37	71	216	211	427
15 " 20	29	29	58	130	217	347
20 " 25	20	17	37	163	205	368
25 " 30	24	13	37	166	219	385
30 " 35	40	17	57	217	232	449
35 " 40	27	9	36	112	137	249
40 " 45	43	9	52	147	136	283
45 " 50	13	6	19	67	79	146
50 " 55	23	7	30	120	97	217
55 " 60	12	3	15	30	31	61
60 " 65	25	6	31	57	53	110
65 " 70	2	1	3	9	17	26
70 " 75	3	..	3	16	10	26
75 " 80	3	..	3	5	4	9
80 " 85	1	..	1	3	1	4
85 " 90	..	..	..	..	..	..
90 and upwards	..	..	..	1	1	2
Ages unknown . .	32	39	71	25	41	66
Total	1,567	1,351	2,918	2,106	2,270	4,376
Not in Limerick . .	..	..	58	55	25	80
Still-born	117	53	170	..	..	..
" sex unknown	..	..	26	..	..	..

* Since this was written I have, through the kindness of Mr. W. Farr, received a copy of the Second Report of the Registrar-General, who observes upon this tendency in very nearly the same terms, and gives it as one of the reasons for adopting a quinquennial classification in the ages. He gives some remarkable instances, taken from the Preface to the Population Returns for 1831, to shew the force with which it operates. Indeed no one who has ever been engaged in taking down the ages of a considerable number of persons, could at all overlook it.

In this table, subtracting 71 deaths which occurred at ages unrecorded, from 2,918, the total number of deaths, we see that out of 2,847 deaths at all ages there occurred—

Under 1 year	933	= 32·8 per cent. or three-eighths.
„ 3 years	1,752	= 61·5 „ five-eighths.
„ 5 „	2,117	= 74·3 „ six-eighths.

We see also that there occurred—

Between 50 and 60	only 45
„ 60 „ 70	„ 34
„ 70 „ 80	„ 6
And above 80	„ 1

The annexed table of the living, shews also the small portion of persons who have reached high ages in these families. We see by it that out of 4,310 persons, whose ages were ascertained, there were living—

Between 50 and 60	only 278
„ 60 „ 70	„ 136
„ 70 „ 80	„ 35
And at 80 „ upwards	„ 6

All the deaths, as I have said, occurred since the period of marriage, and the duration of this term was taken down in about 789 families. From this the mean duration was found to be 17·98, or nearly 18 years, and this mean term was assumed for the rest. Dividing now, 2,918, the total number of deaths, by 18, we have 162·11 for the mean annual number of deaths; and to find the mean number living out of which these deaths occurred,—since 1,017 married couples, or 2,034 persons, had increased in 18 years to 4,376, they would in about 10½ years,* have amounted to 3,205 persons, or the mean number. This, therefore, is the number of the living out of which the above deaths may be supposed to have occurred, and would give a mean annual mortality of about 5·05 per cent., a number consistent enough with the general characters of the tables.

This high rate of mortality is no doubt in some degree owing to local circumstances—to the closeness of the habitations—the numbers by which they are occupied—and the narrowness and filth of the lanes; but as these are not worse than are to be found in the poorer parts of other towns, and as I see the mortality in none of them rated so high, I think its excess must be owing to its being separated from the mortality of other ranks, and considered alone; and therefore that it is to be attributed principally to the state of destitution and misery in which the lower classes always live, and to their daily privations of the comforts and necessities of life. These privations are in their last extreme in many of our Irish towns, and I shall have occasion to refer to them again

* These relations may be had from the equation $x = n \left(\frac{1+r}{r} \right)^q$ where

x is the present number of inhabitants, n , the original number, r , the rate of increase, and q the time. The value of r , in the present case, is about 23, making the rate of increase in these families about 1·23rd per annum. It must be remembered, however, that they are taken in the time of their greatest productiveness, *viz.*, from the period of marriage 18 years forward. The mean annual rate of increase in England, for 30 years from 1801 to 1831, was about 1·67th of the whole. In Ireland, for 90 years from 1731 to 1821, it was about 1·73rd, and for 10 years from that to 1831, about 1·75th.

afterwards ; but that the selection of a particular class is the main cause of the mortality appearing so high in the tables I have given, is evident from the deaths that occur in a different class in the same city. The following are the deaths that have occurred in three Tontine societies established in Limerick, in the years 1807, 1811, and 1814.

In the tontine of 1807, the original nominees were 95, and there had been 29 deaths in 33 years, or 1 in 108 annually.

In the tontine of 1811 the original nominees were 35, and there had been 12 deaths in 29 years, or 1 in 81 annually.

In the tontine of 1814 the original nominees were also 35, and there had been 5 deaths in 26 years, or 1 in 182 annually.

The calculation I have given above would make the deaths among the poor in this city about 1 in 19 annually, if the families among whom my enquiries fell truly represent their condition.

As an instance of the small knowledge of the value of human life displayed in the selection of lives for these tontines, I may mention the fact that the proportion of male to female nominees was 106 to 59 ; that several of the lives chosen were from 1 to 5 years of age ; and that one was that of an infant a month old.

These two series of facts—the deaths in these tontine societies, and the deaths among the poor—may be considered to represent the extremes of mortality,—the maxima and minima of the waste of human life in this city. It is evident from them that any general table of mortality founded upon *all* the deaths that occur in any city similarly circumstanced, must be a mixture of the mortality of many different classes, and can only form a safe basis for insurance when applied to that class in which the mortality is least ; I say least, because the tendency on the part of the public to speculate in insurances may make it unsafe to apply it even to a class in which the mortality is a mean. On the other hand, if such a table were to form the basis for calculations for Friendly Societies, which consist for the most part of people of the humbler ranks, it is equally clear, that as these form much the larger portion of the whole mass, premiums thus deduced must be much too low, and must necessarily end in ruin. This difficulty has long been felt by persons interested in calculations on the duration of human life ; but I believe they have not had any conception of the great space that lies between the extremes. Insurance companies seem aware of it, for they have always shrunk from effecting insurances among the lower classes. It is true these tontine societies have not yet run their course ; still they have, one with another, run through a period of 29 years with a very slight mortality. Many of the lives in them are even now young, and the difference appears to me so remarkable, that it has made me exceedingly anxious to see some steps taken for ascertaining the mortality of different classes in Ireland in such a manner as would enable us to distinguish the quantities attributable to each.* This knowledge, if obtained, would be of the

* I have ventured to suggest a plan to Lord Morpeth, by which, as there is no Act for the registration of births, deaths, and marriages in Ireland, the information necessary for this purpose may be had with great facility, which is, to authorize the enumerators in the census of 1841 to ascertain and note down the deaths that have occurred in each family during the 12 months last past. This additional enquiry would be attended with very little additional trouble, and with no addi-

greatest practical importance. If there be a mortality attributable to poverty—to the want of clothing, food, and fire; and a mortality attributable to the closeness of crowded rooms, the narrowness and filth of streets, and other circumstances which are its ordinary attendants, it is obviously necessary to see how far the sum of these exceeds that which occurs among a class placed in different circumstances, before we can hope to do anything for its diminution, or even devise a rational plan for attaining that object. But it is also extremely important in another point of view. If, as I have before said, premiums or payments of Friendly Societies, founded on a general mortality, without distinction of class, must necessarily terminate in ruin when applied to the poorer classes, it follows, that to be safe when so applied, they must be so high as would place it quite out of the power of these classes to take advantage of them; and thus the very people to whom such societies would be most useful, who are most subject to the calamities against which they were intended to provide, are, until some means are taken to ascertain and lessen the mortality, totally deprived of the only mode by which they could hope to guard against them. There was a time when the Amicable Society thought it necessary to charge a premium of 5*l.* annually for every 100*l.* insured *on all ages under 45* without distinction. We are now in precisely the same predicament with respect to class; and I am convinced that when we have obtained sufficient information upon the subject, it will be found to be nearly, if not quite, as influential an element in increasing or lessening mortality as age.*

Table III. gives the proportion out of 1,000 registered deaths which have occurred at various ages in these families, and shews very strongly the large number that take place at the early ages, and the very small proportion that occur at the later. I have annexed to it a table of the same kind for all England and Wales, taken from the First Report of the Registrar-General, which exhibits remarkable differences at those periods.

These differences are shewn more remarkably in the curves in the opposite table, which bring them at once before the eye. The dotted line represents the proportions among the poor of Limerick. When

tional expense. It would furnish an account of the deaths occurring in every street, lane, and alley, and at the same time the number of living persons out of which these had occurred would be absolute, and not, as in ordinary cases, depending upon estimate or calculation. Nothing scarcely is known of the actual mortality of Ireland, and the facts collected by this simple arrangement would be of such vast practical utility, that I have the strongest hope his Lordship may be induced to adopt the suggestion.

* It is impossible to speak on this subject without referring to the valuable approaches which have been made towards these distinctions by Mr. Farr, in his admirable letters contained in the First and Second Reports of the Registrar-General for England and Wales. The discussions on the "Diseases of Towns and of the Open Country" point directly to the effect of those circumstances, which often accompany distinctions of rank or class, and may be said roughly to indicate the localities of those personal privations which, in conjunction with them, have a tendency to add to the mortality. If it were possible to distinguish the mortality of different classes of the population in the east districts of London, I have no doubt that the higher mortality assigned to that quarter would be found to be very unequally distributed among those classes.

TABLE III.—*Proportion out of 1,000 Registered Deaths which have occurred at various Ages in 1,017 Families of the poorer class in Limerick, and in the whole of England and Wales.*

AGES.	LIMERICK.			ENGLAND and WALES.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 1 year . . .	310·09	348·32	327·71	234·66	193·72	214·54
1 and under 3	290·55	284·30	287·67	127·17	128·85	128·00
3 " 5	112·70	146·34	128·20	47·57	49·47	48·51
5 " 10	91·85	103·66	97·29	45·89	46·27	46·07
10 " 15	22·15	28·20	24·93	24·57	27·30	25·91
15 " 20	18·89	22·10	20·37	30·96	37·48	34·16
20 " 25	13·03	12·96	12·99	39·02	43·50	41·22
25 " 30	15·63	9·91	12·99	35·00	39·97	37·44
30 " 35	26·05	12·96	20·02	33·05	37·42	35·20
35 " 40	17·58	6·86	12·64	32·38	34·25	33·30
40 " 45	28·01	6·86	18·26	32·91	32·69	32·80
45 " 50	8·47	4·57	6·67	32·60	30·65	31·64
50 " 55	14·98	5·33	10·53	32·12	30·80	31·47
55 " 60	7·82	2·28	5·26	33·54	31·42	32·50
60 " 65	15·91	4·57	10·88	40·51	40·64	40·57
65 " 70	1·30	0·76	1·05	41·05	41·83	41·43
70 " 75	1·95	..	1·05	42·95	44·95	43·93
75 " 80	1·95	..	1·05	40·30	43·46	41·85
80 " 85	0·65	..	0·35	30·48	34·89	32·63
85 " 90	..	..	..	16·97	20·86	18·88
90 & upwards	..	..	..	6·26	9·51	7·86

the curve crosses any of the perpendicular lines, the numerals at the sides enable us to judge how many die at the particular age marked at the top of it.*

The differences here are very striking, both at the earlier and later ages. The curve for England and Wales having been derived from large numbers, may be considered tolerably well established as a mean for the whole population, unless it may be influenced by epidemical fluctuations; but I am convinced that the great dissimilarity here exhibited is due rather to the selection of a particular class than to locality, although this last must, of course, have considerable weight. The healthiest locality, therefore, or the healthiest class, is that in which this curve starts from the lowest point, swells about the age of 70, and is most gentle and prolonged in its final descent.

The following table has been constructed to shew the proportions living at various ages in these families, supposing the males and females in them raised to 10,000 respectively; and, like the table of deaths, it exhibits a remarkable falling off at the higher ages. For the sake of comparison upon this point, a table of the same kind for all England, taken from the First Report of the Registrar-General, has been placed beside it; but great caution must be used in drawing inferences from this comparison, as it must be borne in mind that the heads of the families selected in Limerick were all married or widowed, and therefore the table exhibits an excessive proportion both of males and females between 20 and 50, as well as of children under 5 years of age.

* Since these curves were lithographed some slight corrections have been made in the proportions of deaths at different ages in Limerick, but the differences are very insignificant.

TABLE IV.—*Proportion of Persons living at the undermentioned Ages in 1,017 families in Limerick, and in the whole of England; supposing (for the sake of comparison) that the number of Males and Females whose ages have been obtained in these places were 10,000 respectively.*

AGES.	1,017 Families in Limerick.		England.	
	Males.	Females.	Males.	Females.
Under 5 years	1,706	1,345	1,538	1,444
5 to 10	1,283	1,251	1,343	1,268
10 15	1,038	946	1,169	1,056
15 20	624	973	988	995
20 30	1,581	1,902	1,470	1,684
30 40	1,581	1,655	1,155	1,210
40 50	1,028·3	964·5	941·0	932·6
50 60	720·8	574·2	665·6	653·3
60 70	317·1	314·7	447·6	458·0
70 80	100·9	62·8	221·9	228·2
80 90	14·41	4·5	56·25	64·85
90 & upwards	4·80	4·5	4·27	5·97

On reference to Table II. of the living, it will be seen that one male and one female at 90 and upwards are here represented by 4·80 and 4·5, numbers about equal to those in the table for England at that age. This appearance of longevity, however, is quite fallacious, and is merely an effect of calculations founded on small numbers. Its fallaciousness is shewn by the rapid falling off of the numbers from the age of 60 and upwards in this table, as compared with those in the table for England.

The following table exhibits the principal causes of death, with the ages at which the deaths occurred, thrown into terms of 5 years:—

TABLE V.—*Principal Causes of Death.*

DISEASES.		Under 5	5 to 10	10 to 15	15 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	80 to 90 & upwards.	Total.
Endemic, Epidemic, and Contagious Diseases.	Cholera	24	20	8	8	14	11	6	4	2	1	..	98
	Small-pox	333	55	5	..	..	..	..	..	..	..	..	393
	Measles	187	32	6	1	..	..	..	..	..	..	..	226
	Scarlatina	2	..	..	..	..	..	..	..	..	..	..	10
	Hooping Cough	84	10	1	..	..	..	..	..	..	..	..	95
	Croup	85	9	1	..	..	..	..	..	..	..	..	95
	Diarrhœa and Dysentery.	108	19	1	1	1	4	6	6	3	3	..	152
	Fever	70	33	13	15	8	11	11	5	3	..	..	169
Total		899	180	35	25	23	26	23	15	8	4	..	1238
Diseases of the Nervous System.	Cephalitis . . . . .	..	1	2	..	4	1	..	1	..	..	..	9
	Hydrocephalus	13	14	..	1	..	..	..	..	..	..	..	28
	Apoplexy . . . . .	..	..	..	..	1	2	..	..	..	..	..	3
	Paralysis	2	1	1	1	..	3	1	..	..	..	..	9
	Convulsions	569	18	5	1	..	..	1	..	..	..	..	594*
	Epilepsy	1	..	..	..	2	1	..	..	..	..	..	4
	Delirium Tremens . . . . .	..	..	..	..	..	2	..	..	..	..	..	2
	Insanity . . . . .	..	..	..	..	1	..	..	..	..	..	..	1
	Mental Suffering . . . . .	..	..	..	..	..	..	1	..	..	..	..	1
Total		586	34	8	3	7	9	4	2	..	..	..	653

TABLE V.—Principal Causes of Death—(continued.)

DISEASES.		Under 5	5 to 10	10 to 15	15 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	80 to 90 & upwards	Total.
Diseases of the Respiratory System.	Laryngitis	8	1	..	..	..	..	..	..	..	..	..	9
	Quinsey	4	1	..	1	..	1	4	3	6	1	..	6
	Bronchitis	37	1	1	1	..	3	3	3	1	..	..	55
	Pleurisy . . . . .	..	..	1	1	..	2	2	..	9	..	..	11
	Pneumonia	8	1	1	1	..	2	1	..	1	..	..	17
	Asthma	8	..	..	..	..	1	1	11	8	..	..	3
	Consumption	8	13	13	19	25	33	18	..	..	..	..	148
	Disease of Lungs	7	1	..	..	..	..	..	..	..	..	..	8
Total.		72	18	15	23	25	40	28	17	18	1	..	257
Disease of the Heart. . . . .		..	1	..	..	1	..	..	1	..	..	..	3
Diseases of the Intestinal Canal.	Teething	36	..	..	..	..	..	..	..	..	..	..	36
	Gastro Enteritis	3	4	..	..	1	..	1	..	..	..	..	9
	Peritonitis . . . . .	..	..	..	1	1	..	..	..	..	..	..	2
	Ascites . . . . .	..	..	1	..	3	1	..	..	..	..	..	5
	Hernia	5	..	..	..	..	..	..	..	..	..	..	5
	Worms	10	2	..	..	..	..	..	..	..	..	..	12
	Disease of the Di- gestive Organs. }	13	..	1	..	1	..	2	..	1	..	..	18
Total.		67	6	2	..	6	2	3	..	1	..	..	87
Disease of Liver.		5	1	..	1	..	1	1	..	..	..	..	9
Childbed . . . . .		..	..	..	..	5	7	2	..	..	..	..	14
Diseases of Uncertain Feat.	Scrofula	2	3	2	..	..	..	..	..	..	..	..	7
	Atrophy	151	12	..	..	..	..	..	..	..	..	..	163
	Dropsy	3	3	3	1	1	2	1	1	1	..	..	16
	Abscess	15	1	1	..	..	..	..	..	..	..	..	17
	Mortification	3	2	..	..	..	..	..	..	..	..	..	5
Total.		174	21	6	1	1	2	1	1	1	..	..	208
Total of Diseases		1803	261	66	53	68	87	62	36	28	5	..	2469
Violent Deaths		6	..	2	2	1	2	4	1	1	..	..	19†
Causes not specified		308	16	3	3	5	4	5	8	5	1	1	359
Ditto at Unknown Age. . . . .		..	..	..	..	..	..	..	..	..	..	..	71
Total of Deaths		2117	277	71	58	74	93	71	45	34	6	1	2918

The frightful excess of the first class, consisting of epidemic and endemic diseases, among the poor of Limerick, may be gathered from the following fact—that while the per-centage proportion of this class to

* The number stated to have died of convulsions is undoubtedly much too large. It is a custom with the poorer classes in Ireland, both in town and country, to attribute every obscure affection of which a child dies, especially about the age of infancy, to “convulsions.” We hear constantly, too, of their having “inward convulsions,” a term used when this symptom is not obvious to the eye. This, and the circumstance of its being a symptom which often attends the close of many infantile diseases, accounts for the very large number placed under this class.

† Among the violent deaths are included one in which the arm mortified from inoculation by small-pox; two from the sloughing of blisters, applied in one case for chin-cough, and in the other for “Burnt Holes;” one also in which a man was bled for pleurisy by an apothecary, who opened the brachial artery, and in trying to stop the hæmorrhage bound the arm so tight that it mortified. Though these cases cannot strictly be called “violent deaths,” yet the lessons drawn from them are much of the same nature as those derived from that class of causes, and are more likely to be practically useful when so arranged. I have, therefore, placed them under that head.

the whole number of deaths in England and Wales in 1838 was under 20· (19·8); in the Metropolis and Leeds 26·1 and 26· respectively; in Manchester 23·2; in Birmingham 20; and in Liverpool 19·8; it is in Limerick not less than 40·, or nearly five times as great as the proportion of deaths from diseases of the respiratory system, to which, among a healthy population, it ought to be nearly equal.*

The following table gives more particularly the ages at which the deaths by small-pox occurred:—

TABLE VI.—*Deaths by Small-Pox.*

	AGES.				
	Under 1 year.	1 and 2	3 and 4	5 to 9	Above 9
Males . .	33	72	37	29	2
Females .	52	92	47	26	3
Total .	85	164	84	55	5

It is obvious, from this table, that the Vaccination Act just coming into operation in England was not less necessary for Ireland than for that country. It appears, too, that the disease was more fatal to females than to males; a result different from that observed by Mr. Farr, in his letter to the Registrar-General, contained in the First Report of the latter. 16 of the cases in the above table arose from inoculation; I have not ascertained whether any of them were vaccinated.

The following table gives the diseases with which the living were found affected at the time of the enquiry. Under the term "Various Diseases" are included cases of general delicacy, debility, diseases of the eye, with a number of neuralgic affections; and under that of "Diseases" attached to the intestinal affections, are included all gastro-enteric disorders, whether painful or otherwise, not included under the previous heads. I must also remark, that under the term "Bronchitis, acute and chronic," are included all cases of coughs and severe colds affecting the bronchial membrane.

TABLE VII.—*Diseases of the Living.*

DISEASES.		Under 5	5 to 10	10 to 15	15 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	80 to 90 & upwards.	Total.
Endemic, Epidemic, and Contagious Diseases.	{ Small-Pox	13	1	..	..	..	..	..	..	..	..	..	14
	{ Measles	5	12	1	..	1	..	..	..	..	..	..	19
	{ Hooping-Cough . .	6	3	..	1	..	..	..	..	..	..	..	10
	{ Thrush	2	..	..	..	..	..	..	..	..	..	..	2
	{ Diarrhoea, and } Dysentery }	29	7	3	1	2	7	2	2	..	..	..	53
	{ Fever	32	13	3	2	5	2	1	..	..	..	..	60
	Total	87	36	7	4	5	12	4	3	..	..	..	158

* "Wherever the absolute mortality is low, the number of deaths in the epidemic class is less than the number in the pulmonary class; and on the contrary, wherever the deaths in the first class exceed or equal those in the third, it may be affirmed that the absolute mortality is high."—*App. to 1st Report of Registrar-General, 8vo. Ed., page 111.*

TABLE VII.—Diseases of the Living—(continued).

DISEASES.		Under 5	5 to 10	10 to 15	15 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	80 to 90 & upwards.	Total.
Diseases of the Nervous System.	Paralysis . . . .	..	1	..	..	..	..	3	3	..	..	..	7
	Epilepsy . . . .	..	..	..	..	4	1	..	..	..	..	..	5
	Total . . . . .	..	1	..	..	4	1	3	3	..	..	..	12
Diseases of the Respiratory System.	Bronchitis, Acute and Chronic	8	..	3	3	8	20	21	24	18	5	..	110
	Pleurisy and Pneumonia . . . .	..	..	..	..	5	10	2	3	6	1	..	27
	Asthma . . . . .	..	..	..	1	..	..	2	3	..	..	..	6
	Consumption . . .	..	..	5	3	9	3	2	3	..	..	..	25
	Diseases of the Lungs	5	1	..	1	3	6	2	2	..	2	..	22
Total		13	1	8	8	25	39	27	34	27	8	..	190
Diseases of the Intestinal Canal and Liver.	Teething	3	..	..	..	..	..	..	..	..	..	..	3
	Ascites . . . . .	..	..	..	..	..	2	..	..	..	..	..	2
	Worms	8	13	7	..	2	..	..	..	..	..	..	30
	Hepatitis, Acute, and Chronic . . . .	..	..	..	..	2	3	2	..	1	1	..	9
Total		6	..	2	2	17	29	14	11	7	..	..	88
Total		17	13	9	2	21	32	18	11	8	1	..	132
Generative System.	Paramenia . . . .	..	..	..	5	3	3	1	..	..	..	..	12
Motory System.	Rheumatism . . .	..	..	..	2	6	8	10	14	4	1	..	45
Diseases of uncertain Seat.	Scrofula	4	5	..	..	..	..	..	..	..	..	..	9
	Atrophy	5	..	..	..	..	..	..	..	..	..	..	5
	Dropsy . . . . .	..	1	..	..	..	1	2	1	1	..	..	6
	Integumentary System	36	13	12	5	9	4	7	5	7	1	1	100
Wounds, Acci- dents, &c.		3	2	2	2	5	..	3	4	2	1	1	25
Various Diseases . .		21	17	15	16	31	38	29	26	18	2	1	214
Total		186	89	53	44	109	138	104	101	67	14	3	908

TABLE VIII.—Proportion of Sick to the Population at different Ages.

AGES.	Number Living at each Age.	Number Sick at each Age.	Per-centage Proportion of Sick to the Number Living at each Age.
Under 5 years	655	186	28·39 or one in 3·5
5 to 10	546	89	16·30 „ 6·1
10 15	427	53	12·41 „ 8·
15 20	347	44	12·68 „ 7·8
20 30	753	109	14·47 „ 6·9
30 40	698	138	19·77 „ 5·
40 50	429	104	24·24 „ 4·1
50 60	278	101	36·33 „ 2·7
60 70	136	67	49·26 „ 2·
70 80	35	14	40·00 „ 2·5
Above 80	6	3	50·00 „ 2·
Unknown	66	..	.. ..
Total . .	4,376	908	20·69 „ 4·8

How admirably the foregoing table exhibits the susceptibilities of childhood, and the growing infirmities of age. It has been calculated from Table VII. and from that of the living, No. II.

The general uniformity of the results here displayed will serve to create confidence in the particulars collected regarding the living. The table represents the proportion of the sick to the population at all ages, and including all classes of disorders, at rather more than 20 per cent., or 1 in 5, at the time of the enquiry. But these diseases were the cause of the parties applying at the Dispensary, they may therefore be considered as selected on account of them; and the proportion of sick to healthy in these families cannot correctly represent the proportion of sick to healthy among the whole mass of the poor. It would appear from this table, too, that the age of least mortality is also the age of least sickness, *viz.*, from 10 to 20.

It might be supposed that the proportion dying at different ages could be obtained in the same manner, and something like a mortality table be constructed, which might be compared with the Carlisle, or any other similar table. With this view I drew up the following statement of the number of children who had died, or were still living, at each age, which is the best foundation for such a table that my data will afford. But it

Number of Children Living and Dead in 1,017 Families of the poorer class in Limerick, distinguishing the Ages.

AGES.	Living.			Dead.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 1 year	74	67	141	476	457	933
1 and under 3	153	116	269	446	373	819
3 " 5	128	117	245	173	192	365
5 " 10	267	279	546	141	136	277
10 " 15	216	211	427	34	37	71
15 " 20	130	217	347	29	29	58
20 " 25	128	142	270	20	17	37
25 " 30	69	76	145	7	5	12
30 " 35	56	45	101	12	5	17
35 " 40	25	14	39	2	3	5
40 " 45	13	8	21	2	1	3
45 " 50	4	1	5	..	..	..
50 " 55	3	..	3	..	..	..
Ages unknown	18	23	41	20	18	38
Soldiers, Emi- grants, &c. }	55	25	80	35	14	49
Total . .	1,339	1,341	2,680	1,397	1,287	2,684

will be seen, that as one-half of the individuals are still living, and as the observation of their lives did not begin at the same period, no deductions can be drawn from the table, without making an estimate of the annual deaths that would occur among those still living, which is the very point we seek to ascertain. In order to calculate the deaths under 1 year, it would be necessary to add to 933, the number already dead under that age, a certain unknown proportion of 141 who had not yet completed their first year. So, for the second term, there should be added to 819 a proportion of the 269 who had completed their first but had not attained their third year, together with a similar proportion of

the survivors of the 141, who would then have entered the second class. Each further term would thus be liable to an additional uncertainty; and for this reason, I am unable to furnish a mortality table worthy of credit. My enquiries, however, into this immediate point, which were made subsequent to the completion of this memoir, have led me to the belief that other large towns may be found in which the mortality is little, if at all, inferior to that which I have observed at Limerick. But this, though it may deprive Limerick of an unenviable pre-eminence, proves the existence of a still greater amount of those evils to which I would call attention, with the hope of awakening the sympathy, and arousing the efforts, of the public, and of persons possessing authority to remove or lessen them.

Productiveness and Loss of Children.—The following table is very curious; it exhibits the power of production and amount of loss in these families, and it has been thrown into this form to shew how general was the destroying influence. Great losses in a few families may arise from constitutional circumstances, but few being exempt from loss must indicate some general agency. Tables of this nature, if founded on a sufficient number of observations, would be useful to those offices which engage for a premium, beginning at marriage, to endow each child born of such marriage on its coming of age; but to do business by this table would certainly not be doing it on what is called the *safe* side. The table is read thus:—If, for instance, we want to find how many families had seven children each, on a line with the figure 7 in the first column, we find that one family had 7 still-born children; 95 families had 7 living children each, and 37 families had lost 7 children each. The still-born are included among the lost in the last column.

TABLE IX.—*Productiveness and Loss of Children.*

Number of Children.	Number of Families who had Children.		
	Still-Born.	Born Living.	Lost.
0	895	22	153
1	80	76	196
2	20	109	170
3	16	104	142
4	4	128	102
5	1	102	98
6	..	114	44
7	1	95	37
8	..	69	20
9	..	75	12
10	..	53	7
11	..	24	7
12	..	19	1
13	..	6	1
14	..	6	3
15	..	7	1
16	..	1	..
17	..	2	..
18	..	1	..
	..	Omitted 4	Omitted 23
Total .	1,017	1,017	1,017

born in single families, for which these last are remarkable. It is true that the fact of the productiveness being on the whole higher in the suburban parishes (where the mortality is least), bears against this view; but the rate of production is very high in all the parishes, and I doubt whether its excess in these parts may not be an accidental circumstance arising from small numbers. The subject is very curious; and it is an interesting question, whether the great power of production manifested in these circumstances,—the only vital power then unsubdued,—is not an effort of nature to contend against those destroying agencies which would otherwise sweep off whole races.

Death of Parents and Second Marriages.—Of the parents there died in the 18 years specified, 200 men and 65 women. 20 men had married a second, and 1 a third time, and 31 women had married a second time. The surviving parents were, therefore, 1,821, and 265 deaths on this number is about 14·55 per cent. in the 18 years, or 0·8 per cent. per annum. The number of second and third marriages may be somewhat more than is here stated, as they were not always very strictly enquired into. It is shewn by this and the following calculation that by far the larger portion of the mortality has occurred among the children. In the 1,017 families there were found, at the time of the enquiry, the numbers undermentioned:—

Total number living (excluding emigrants) . . .	4,376, or 4·3	to a family.
Children, living ditto . . .	2,600	2·55 ,,
Children, dead . . .	2,635	2·59 ,,
Total children, including still-born, emigrants, &c. . .	5,560	5·46 ,,

The disproportion here is very remarkable between the total number born and the number still living, particularly as so few of the deaths occurred at an advanced age.

Ages at Marriage.—Of 749 men and 735 women, the following table shews the number who married at the different ages specified in it. They were obtained by subtracting the term, during which marriage had been ascertained to have lasted in each family at the time of the enquiry, from the present age of the parties:—

TABLE XI.—*Ages of Males and Females at Marriage.*

Ages.	Persons.		Ages.	Persons.		Ages.	Persons.	
	Males.	Females.		Males.	Females.		Males.	Females.
13	..	4	29	23	12	45	2	..
14	..	7	30	26	21	46	1	1
15	1	20	31	20	6	47	3	1
16	8	50	32	22	12	48	1	1
17	20	48	33	17	8	49	1	..
18	29	68	34	13	5	51	2	..
19	40	72	35	18	3	52	1	..
20	72	83	36	12	3	53	1	..
21	55	58	37	5	6	54	2	..
22	53	46	38	8	..	56	1	..
23	55	43	39	7	1	57	2	..
24	42	38	40	7	4	60	1	..
25	47	42	41	7	2	66	1	..
26	41	31	42	3	1	73	1	..
27	41	26	43	3	..	Total	749	735
28	33	12	44	1	..			

The extremely early age at which many of these marriages took place will, no doubt, surprise most people very much. I have reason to think they are not very incorrect; and those which occurred at the very early ages stated were always strictly enquired into. Of the 4 females stated to have been married at 13, two were well authenticated instances that occurred in the country; one of these had her first child at 14. The other two took place in the city, and were actually not quite 13 at the time of marriage. In one of these instances, when I said to the mother, "This girl must have been exceedingly anxious to get married to marry so very young," she replied, "Oh no, sir, she knew nothing about marriage, nor what belonged to it. The priest sent her away three times before she was married, he thought her so young." In general, I believe, these early unions are brought about entirely by the parents, as in this instance, when an eligible choice offers; the temptation to which is the stronger from the circumstance that the children of the more comfortable of the lower classes will often marry against their parents' wishes, under the more fully-formed feelings of a riper age. These early marriages are sometimes very fruitful. Calculations founded on this table give the mean age at marriage for men, 26·1 years, and for women, 22 years.

In the earlier part of this year the Committee of the Limerick Lying-in Hospital, a small but excellently arranged institution, adopted, at my suggestion, a form of registry for lying-in charities, recommended by the London Statistical Society; from this record I have formed the following table of the ages at which the marriages of 342 women took place. This register is kept with great care by all the medical officers of the institution, and I think the particulars noted in it are as accurate as those in any other establishment of the kind. The table gives 22·3 years as the mean age at marriage of these 342 women—a result differing very little from that deduced from the former Table.

TABLE XII.—*Ages of Females at Marriage.*

Ages.	Females.	Ages.	Females.	Ages.	Females.
15	9	26	15	37	..
16	10	27	20	38	..
17	12	28	10	39	..
18	27	29	6	40	1
19	28	30	2	Total . . 342 Unmarried 19 Widows . . 2	
20	46	31	4		
21	25	32	3		
22	36	33	2	Total . . 363	
23	29	34	..		
24	28	35	4		
25	24	36	1		

Occupations.—In 856 instances the occupations of the heads of families were enquired into, and the following table exhibits a list of them in the order of the numbers belonging to each. Those under the head of "Labourers" are usually employed about the stores and other places of business; they generally turn their hands to anything that offers in the way of work, and are for the most part half their time unoccupied.

TABLE XIII.—*Occupations of Adults.*

Occupations.	No.	Occupations	No.	Occupations.	No.
Labourers. . .	369	Pig Jobbers . .	11	Corn Buyers . .	5
Shoemakers . .	50	Retailers . . .	11	Brokers	5
Tailors. . . .	31	Slaters	10	Snuff Grinders .	5
Weavers . . .	29	Clerks	10	House Painters .	4
Smiths	22	Sawyers	8	Tobacco Spinners	3
Carpenters . .	22	Carmen	8	Marble Polishers	3
Masons	21	Watchmen . . .	7	Curriers	3
Coopers	20	Gardeners . . .	7	Brushmakers . .	3
Servants . . .	19	Schoolmasters .	6	Other occupations	91
Pensioners . .	14	Hat Dressers . .	6		
Nailers	13	Butchers	6	Total	856
Bakers.	12	Boatmen	6		
Ropemakers . .	11	Wool Combers .	5		

Condition of the Poorer Classes, and Causes of Mortality.—In enquiring into the occupations of families given in the above table, I was continually met by the answer—"A labourer, sir, when he can get anything to do,"—or, "a labourer, a week at work and a fortnight idle,"—or, "one day at work and three days idle," or,— "a week at work and a month idle." These expressions were so common that I do not think there was an exception to this mode of answering, at least on the part of the labouring portion, in almost any one of the instances enquired into. The observation applies with a little less degree of force to the tradespeople who fell in my way during this investigation, although many of them were, from the same cause, in a state closely bordering on destitution; but the labourers, who it will be seen by the above table bear a more than ordinary high proportion to those in other employments, seem to suffer most. I have known, myself, one instance in which an able-bodied labourer was not able to obtain one full day's work from Christmas-day to the middle of February. I have had lately under my care in the County of Limerick Infirmary a case of mild insanity, with partial paralysis of the right side. I visited this man at his own home before his admission to the infirmary; he had been some months out of employment, and his friends attributed the attack to the excess of his joy on receiving a promise of constant employment for some time at a shilling a day. The women get employment where and when they can, at any kind of drudgery that offers; or very often they endeavour to carry on a little trade on some small savings out of their husbands' earnings, out of the profits of which they obtain a very scanty subsistence; or what is not uncommon, some better article of dress is pledged on Monday morning to obtain the little capital this trade requires, and is released on Saturday evening. I have known the husband's Sunday coat repeatedly released in this manner on Saturday evening for the purpose of being worn on Sunday, and returned to the pawn-office on Monday morning. As may readily be anticipated these miserable shifts do not always succeed. When the week's trade is unsuccessful, the coat remains in pawn, and on the Monday following some other article supplies its place; and so it goes on, until by some lucky chance they are again released, or, what is much more common, article

follows article, until every thing on which a penny can be raised is gone, and then comes the wind up. From this time forward there is a daily contest for even one day's existence, and the unhappy family is doomed to a course of privation and suffering, the very thought of which sickens the heart. The same thing takes place much more speedily if the husband or wife be attacked by sickness, or if the former gets a fall and is disabled, or by any other circumstance is rendered incapable of work ; for owing to the small number of manufactures yet established in the city, and the great numbers who stand in need of employment, the earnings of the wife or daughters are not worth counting, and the whole family are mainly dependant on the husband for support ; so that their being paupers, or not, depends upon his preserving his health and procuring employment. If either of these fails, the course I have above described commences.

This practice of pawning is carried on with much less disadvantage to the poor since the establishment of the Mont de Piété in this city ; but the extent to which it prevails among the lower classes may easily be judged of by any person who walks through Mary-street at the rear of that establishment. He will there see a quantity of clothes hanging out in the street for sale, which is sufficient to surprise any body, obtained for the most part at the public sales of the different pawn-offices in the town ; and offered to the public again on such terms as shew clearly how little advantage their original possessors derived from parting with them. Families driven to the straits above described, usually betake themselves to one of the decaying houses in the oldest part of the town, already overstocked with tenants, and occupy a single room there at from 4*d.* to 1*s.* a week, and for the rest contrive to get food when and how they can.

That the course I have above described is not a solitary instance, or the representative of a small number, may be believed when I mention that, in the worst part of the old town every room in these wretched ruined abodes is let to a separate family, and often to more than one. I have known myself several of those houses occupied by 8, 9, 11, 13, and I have heard that some of them are occupied by 16, families. I have seen three families living together in a room scarcely seven feet square ! It would indeed be a most interesting subject for investigation, and one which I am sure would tend to great practical good—an enquiry into the condition of these poor strugglers—the number to each house—the rents they pay—their mode of obtaining a livelihood, and other particulars regarding them ; but I fear I should not be able to devote sufficient time to it. Here, amid broken banisters, falling staircases, sinking floors, and shattered roofs that admit every blast, may be witnessed every variety of privation, misery, and suffering in all its horror, which it is possible for the human mind to contemplate. I have read all that has been written on the condition of the poor in Scotland and other places, and in nothing they describe do they exceed what is exhibited in Limerick. I have seen a wretched mother lying sick on a mat in the corner of a garret—her only covering a few rags—without a drop to wet her lips for three days but cold water—her husband dead, and three little children on the floor, who were frequently eight-and-forty hours without tasting a morsel of food ! But this last is by no means an

uncommon occurrence among them, and sometimes the interval passed without food is much longer. I have seen children, not otherwise unhealthy, fall into a dropsical state and die from the absolute debility produced by repeated abstinence. I have known a wretched young creature, a widow, without clothing, food or fire, when every rag was pledged, place her dying infant between her lower limbs in its last moments in a position which it is not easy to describe, in order to keep some warmth in it while it was expiring.

One of the most astonishing things connected with these circumstances of distress is the patience and resignation with which they are accompanied. To think not only that the whole people should not rise up and cry out with one voice against such a state of things, but that we should be able, without police or military, to bring bread and meat through the streets, and take it into our houses, and eat it without interruption, is to me one of the most surprising instances of the recognition of the rights of property that any nation could possibly display. I cannot conceive it possible for any person of well-regulated habits of thought, to visit such scenes as I have described, and return to his daily blessings without trembling—without asking himself, with a shudder, what it is that gives him a title to such comforts, while thousands who breathe the same air and look at the same light—who are no worse in a moral point of view, and who in many instances—these trials not one of the least—exhibit religious feelings of infinitely greater depth and reality—are daily and nightly exposed to a degree of suffering that might be thought sufficient to atone for any crime. It may be thought unnecessary to dwell upon these circumstances, now that the Poor Law is just coming into operation, but I do so partly because I believe that it is not sufficiently understood how very much the amount of pauperism to be relieved will depend upon means directed to the preservation of the health of the poorer classes out of doors, and how much it may be increased, or diminished, by attending to or neglecting this circumstance; and partly because there are many persons still to be found who were averse to a provision for the poor before it became law—who contended that it would only produce an increase of pauperism—as if this were possible!—with whom the idleness of professional beggars—the daily and nightly thefts on industrious farmers, and the ditch-side morality of wandering multitudes went all for nothing; or, still worse, who looked to the actual amount of destitution and sickness among the really poor, as a means of lessening the population, and with the same short-sighted feeling still hanging about them, would now administer it with a niggardly and pinching economy as regards the public health, that will be sure to produce the very effect they have always so much dreaded. It is a poor argument for that *soi-disant* philosophy which has been gaining ground in later times, that it lends a strong sanction to these unchristian views. If it be not sufficiently obvious that one of the most expensive of all populations to the community is a sickly population, one may remark, that if the above principle be true—if it be really possible to diminish or check the growth of a population by this method,—we are only adopting half measures. To be consistent we should shut up our hospitals, abandon our institutions for the relief of the sick poor, and let death have his fling. When one considers the

spirit in which these opinions are sometimes urged, and the contrast between it and that feeling which animated the charities of an earlier age in these countries, it is only surprising that some one has not been found hardy enough to make this proposal. It is a melancholy circumstance that the falsehood of such principles will only be fully exposed when millions have suffered, and hundreds of thousands have been swept away in the trial; but that they *are* false is obvious from the tables I have given relating to the productiveness and loss of children. We see by Table IX. that while there was a loss of 2·59 children to each family, or 49·66 per cent. on the number born, there were still left 2·55 children to a family; or taking the total number of the living at the time of the enquiry, there was an average of 4·3 living persons to a family, a number which, notwithstanding the greatness of the loss previously sustained, falls very little short of 4·77, which, according to the census of 1831, is the average number to a family for all England, where the losses cannot have been at all so great. The particulars given at the foot of Table X. will also serve to shew how much is likely to be gained by any attempt to push such principles. In fact, this is a remarkable proof that in the vital sciences, as in the physical, any effort to contend against the powers of nature will be sure to end in defeat and failure.

These remarks on the necessity of paying extreme attention to the health of the poor out of doors, appear to me of extreme importance; because I have observed that among many of the families whose wretched circumstances I have described, there was still a feeling of independence that would make them shrink from accepting relief in a workhouse as long as it was at all possible to exist without it. Several of these poor people assured me they would be quite satisfied if they could by any means obtain a few potatoes once every day. Many of them were rather decent people who had once been better off, and were in general unwilling to complain, whose distresses I heard rather from others in the next rooms to them than from themselves; and in one instance, some children were pointed out to me not more than 5 or 6 years of age, who, I was told, would rather remain two days without food than go into the streets to beg. Nothing, indeed, can be more touching than the contrast between the silent endurance of these poor creatures, and the practised and persevering whine of the weather-seasoned street beggar. In the cities there are no means of ascertaining what the gains may be of the persons who follow this profession; but in the country they are infinitely better off than the labouring part of the population; and, what is very singular, the dearer the season, the greater is their advantage. A beggar, by receiving a few potatoes at every house, will collect above four stone of them in the course of the day, which, at 4d. a stone, is 1s. 4d., about double the sum which a labourer could earn in the same time: and it must not be imagined that they will receive so much the less if it be a dear season. This is so far from being the case, that, it is to be feared, unless some means are adopted to check vagrancy, when the Poor Law Act is in operation, the country people will adhere to the practice of charity in this doubtful form with a scrupulous pertinacity. I know myself one poor widow who, in the scarce season, fearing she would be deprived of

the power of exercising this charity, measured over her heap of potatoes, and found that she would be only able to continue it by restricting herself and her daughter to two small meals each day, which plan she at once adopted; and so great were her scruples about doing justice to the poor, that she made it a practice, whenever a poor person called, to go to the heap of potatoes with her eyes shut, lest she should by any feeling be tempted to select those of indifferent size and quality. These things must not be considered unimportant as signs of the national disposition. That they are not solitary instances may be judged from the fact that, in the town of Askeaton, during the scarcity of this year, it is said that the poor of the town would not have known what to do, owing to the high price to which potatoes would have run, if it had not been for the quantities brought to the public scales for sale by the beggars!!

With regard to the classes who possess a more independent feeling, their universal complaint is want of employment. Some were pointed out to me as persons capable of doing any work, however fine, with their needles, but who could not obtain one hour's occupation. It is obvious that however desirable it may be to encourage those feelings of independence, they must inevitably languish and die away altogether under such depressing circumstances; and that if it is found impossible to devise any means of procuring them that constant employment which would make them perfectly independent, such attention should at least be paid to the preservation of their health, as may prevent them from being disabled for such occupations as occasionally fall in their way. It is impossible to insist too much upon this point as a means of diminishing pauperism, and it may be regarded as certain, that to the proper administration of a poor-law, the efficient working of our medical charities is as essential as any other circumstance whatever.

These remarks have run to a greater length than I had intended; and the only observations I have to make in addition, relate to those local circumstances which tend to affect the health of the lower classes. The principal of these, independent of the closeness and want of comfort of their rooms and houses, is the practice which prevails in the poorer parts of all our towns to a frightful extent, of making dung-pits, and keeping stagnant pools for that purpose, close by their doors. On this practice so much evidence has been laid before a Committee of the House of Commons this year, that it is unnecessary to say more at present than that it prevails in Limerick, about the old town, to a degree which is offensive, disgusting, and frightful to the last degree—every rut formed by a car-wheel is filled with the offal of some house near it; and there is scarcely a single door that has not a pit beside it into which the refuse of their straw beds, and every kind of filth is flung. The older part of the city, too, is remarkable for the narrowness and closeness of its lanes and the filth of its courts, with those other circumstances of importance to public health to which the attention of that Committee was drawn. It is obvious that these evils can only be fully remedied by some general legislation on the sewerage, drainage, and building in towns; and it is equally obvious that as they are circumstances which affect large masses of the population, they should be speedily remedied.

I was very anxious to prolong this enquiry, and to extend it to larger numbers, but the length of time which it occupied, the slowness with

which it went on, and an impression that rested on my mind throughout its progress, that the results would be much more unsatisfactory and uncertain than they have proved, made me bring it to a close. The only remark which I have to make in conclusion appears to me one of great importance: if mismanagement, neglect, and wretchedness of every kind, be capable of increasing so enormously the mortality of the human family, and if in general we observe it bear a proportion to their poverty, and the closeness and filth of their habitations, what may we not hope from a better system? May we not reasonably expect, by improving their domestic circumstances, to see it brought within bounds that were never anticipated?

Since the above was written, it has been suggested to me to subjoin to this paper the form used in the collection of the data, together with a second form by which it is proposed, at the close of each year, to obtain an account of the mortality and the quantity of sickness that has occurred in each family of the Temperance and other Friendly Societies in Ireland, from its commencement to its close.* The enquiry is intended to be conducted under the direction, and with the assistance, of the presidents and vice-presidents of the different societies, who are generally Roman Catholic clergymen, and always persons of some weight and influence with the members. I have already had communication with several of them, and they state that they do not anticipate any practical difficulty in getting such forms accurately filled. The utility of the results which may be obtained by such an enquiry is obvious. The want of a sufficient number of facts on the subject has long been felt by all those to whom the members of Friendly Societies are in the habit of applying for information, as to what ought to be the amount of their weekly contributions, and the allowances which they should make during sickness and at death. If the first are too high it shuts out a number of persons from the benefits of the society who might otherwise afford to become members; and, if the last are extravagant, there is an obvious injustice done to the later claimants. But it is clear that the persons to whom they thus apply, however expert as calculators, can give them no effective assistance without some facts to enable them to judge of the amount of mortality and sickness that is likely to occur, and these facts can only be supplied with facility by the societies themselves. If only fifty persons in every town would each undertake to obtain the particulars occurring in 100 families in his district, according to the form suggested, we should have then for every town the quantity of sickness, and the number of deaths occurring in the course of a year among 5,000 families, or above 25,000 persons. Also, if the same enquiry were set on foot in England and Scotland, as I earnestly hope it will be, and the same form adopted, it would not only be productive of similar advantages, but would furnish us with the direct means of comparing the mortality in this country with that occurring in Great Britain.

* See next page.

FORM, No. 1.—Used by Dr. Griffin in the foregoing Enquiry.

PARENTS' NAMES.	Ages.		Living Children.		Ages.		STATE OF HEALTH.		Dead Children.		Ages.		CAUSE OF DEATH.
	Yrs.	Mths.			Yrs.	Mths.					Yrs.	Mths.	
21* James Sullivan (Rope-maker)	42	0	Mary	.	10	0	Fever and Diarrhoea.		Jane	.	17	0	Typhus Fever.
Mary	44	0	Patrick	.	18	0			Bridget	.	4	0	Measles.
Residence, St. John's (always) . .	..		Johanna	.	14	11			James	.	0	9	Ditto.

* The Numeral prefixed to the Husband's Name, denotes the term which Marriage had lasted at the time of the enquiry.

FORM, No. 2.—Proposed by Dr. Griffin for the Enquiry suggested in the foregoing Paper.—(See page 329).

Name of Town } Name of Parish }		Name of Street, Court, } or Locality }		State of Street, Court, } or Locality }		Circumstances } of Family }		Causes of Death.	
Name of Persons now living in the Family.	Ages last Birth- day.	Occupation of each.	Nature of Sickness (if any) experienced by each, in the year 184 .	Number of Days confined		Names of Persons (if any) who died in the year 184 .	Ages last Birth- day.		Date of Death, if known.
				To the House.	To the Bed.				